

Claims:

1. (Currently Amended) A mounting assembly for fastening a device housing onto a panel wall having a front surface, a rear surface, and an opening extending therethrough for receiving the housing, the mounting assembly comprising:

a housing including at least one wall sized to extend through the an opening formed in a panel having a front surface, and a rear surface so that a flange of the housing abuts the front surface of the panel wall when the wall extends through the opening;

a slot adjacent to the rear surface of the panel wall when the wall extends through the opening extending through the wall that is sloped from a distal location to a proximal location with respect to the panel wall; and

a clamp including:

a cam body rotatable about an axis having a first cam surface and a second cam surface displaced radially from the axis;

a shaft extending along the axis from the cam body, wherein the shaft is displaced a first distance to the first cam surface that is less than a second distance defined between the shaft and the second cam surface; and

a shaft flange at an end of the shaft extending radially outward from the axis and sized to be received and retained in the slot;

wherein the clamp is configured to fasten the housing to the panel wall by inserting the shaft flange into the slot, translating the clamp along the slot until the first cam surface is disposed proximal the panel wall, and rotating the clamp relative to the panel wall until the second cam surface engages the panel wall.

2. (Previously Presented) The mounting assembly as recited in claim 1, wherein a curved surface joins the first cam surface to the second cam surface, and wherein the curved surface defines a third distance to the shaft that is between the first and second distances.

3. (Previously Presented) The mounting assembly as recited in claim 1, wherein the first cam surface comprises an end wall.

4. (Previously Presented) The mounting assembly as recited in claim 1, wherein the second cam surface is a side wall

5. (Previously Presented) The mounting assembly as recited in claim 1, wherein the clamp further comprises at least one friction member extending inwardly from the shaft flange.

6. (Previously Presented) The mounting assembly as recited in claim 5, wherein the second cam surface is a side wall; and
wherein the friction member defines a distance to the cam body that is less than a thickness of the side wall.

7. (Previously Presented) The mounting assembly as recited in claim 5, wherein the second cam surface is a side wall; and
wherein the friction member engages the side wall when the clamp is rotated.

8. (Original) The mounting assembly as recited in claim 7, wherein the slot comprises a plurality of engagement locations separated by adjacent teeth operable to engage the shaft.

9. (Original) The mounting assembly as recited in claim 8, wherein the shaft is cylindrical and wherein the engagement locations define arced surfaces.

10. (Original) The mounting assembly as recited in claim 1, wherein a notch is formed in the clamp to gauge clamp position within the slot.

11. (Previously Presented) The mounting assembly as recited in claim 1, wherein the slot further comprises a keyhole operable to receive the shaft flange.

12. (Previously Presented) The mounting assembly as recited in claim 1, wherein the housing is adapted to house an industrial control device.

13. (Previously Presented) The mounting assembly as recited in claim 1, wherein the housing is adapted to house a human-machine interface.

14. (Previously Presented) A method for fastening an industrial control device housing onto a panel wall having a front surface, a rear surface, and an opening extending therethrough for receiving the housing, the method comprising:

A) providing a housing including at least one side wall sized to extend through the opening so that a flange of the housing abuts the front surface of the panel wall when the wall extends through the opening, and a slot adjacent to the rear surface of the panel wall when the wall extends through the opening extending through the side wall that is sloped from a distal location to a proximal location with respect to the panel wall;

B) a clamp including:

i. a cam body rotatable about an axis having a first cam surface and a second cam surface displaced radially from the axis;

ii. a shaft extending along the axis from the cam body, wherein the shaft is displaced a first distance to the first cam surface that is less than a second distance defined between the shaft and the second cam surface; and

iii. a shaft flange at an end of the shaft extending radially outward from the axis and sized to be received and retained in the slot;

C) inserting the flange shaft flange through the slot such that the first cam surface is separated from the panel wall;

D) translating the flange shaft flange along the slot until the first cam surface is disposed proximal the panel wall; and

E) rotating the clamp until the second cam surface abuts the panel wall.

15. (Previously Presented) The method as recited in claim 14, wherein step (C) further comprises inserting the shaft flange through a keyhole formed in the slot that is sized to receive the shaft flange.

16. (Previously Presented) The method as recited in claim 14, wherein step (D) further comprises translating the shaft flange between engagement locations that are separated by inwardly extending teeth.

17. (Original) The method as recited in claim 14, wherein step (E) further comprises engaging a friction member with the side wall.

18. (Previously Presented) The method as recited in claim 14, wherein step (E) further comprises engaging a curved surface with the panel wall, wherein the curved surface is positioned at an interface between the first cam surface and second cam surface.